

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. The previous amendment and reply submitted June 17, 2005 was not entered by Examiner. This Amendment is intended to be completely responsive to the final Office Action mailed on April 18, 2005. Claims 14 and 19-38 are pending in the Application. Claims 14, 26, 35, and 37-38 have been amended.

Claim Rejections – 35 U.S.C. § 102(b)

In Section 3 of the Office Action, the Examiner rejected Claims 14, 19-22, 26, 29, 31-32 and 35-38 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,858,450 issued to Jones (Jones).

Jones describes a “sampling, mixing and metering apparatus” including a “sampling head 12 [that] includes a valve mechanism 16 defined by first and second valve blocks 18 and 20 respectively, linearly movable (slidable) relative to each other between two valve positions, namely, a sampling position and a delivery position” (see col. 1, lines 67-68 and col. 1, lines 1-3). Jones further discloses a “scavenge vacuum device 54 [that] extracts or evacuates most of the sample left in passageway 90 (and the probe 92 connected thereto)” but acknowledges that “in fact all of the liquid picked up by the probe may not be sucked into the probe and wiping of the probe to prevent contamination or carry over into the next sample could become necessary” (see col. 8, lines 32-34 and col. 9, lines 30-33).

U.S. Patent No. 6,656,724 issued to Heimberg et al. (Heimberg et al.) describes an apparatus having a “worksurface 2” and a “horizontal rail 7.” A “robotic arm 8” includes a “rail 12” and travels longitudinally on rail 7. “Mounted traveling on rail 12 in the longitudinal direction thereof (Y direction) are three Z arms 13-15.” The “Z arm 13” has “an element for mounting a pipette tip 20.” (See col. 2, lines 58-65 and col. 3, lines 4-7 and 18-20). Heimberg et al. does not disclose, teach or suggest a “probe holder slidably mounted on the Z arm” as required by independent Claim 37.

Independent Claim 14

Claim 14 is in independent form. Dependent Claims 19-36 depend from independent Claim 14. Independent Claim 14 recites a “liquid chromatography sample injection system” comprising, in combination with other elements, a “pump valve interfacing with the injector valve and a probe pump and a source of dilutant; wherein the pump valve is movable between a first position where the probe pump is operable to dispense and aspirate through the probe, and a second position where the probe pump communicates with the source of dilutant for rinsing the probe.”

The Applicant submits that the combination of subject matter recited in independent Claim 14, considered as a whole, is not disclosed, taught or suggested by Jones, alone or in any combination with the other references cited in the Final Office Action, because Jones does not disclose, teach or suggest a “source of dilutant” and a “pump valve” operable for “rinsing the probe” as required by independent Claim 14.

Accordingly, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of independent Claim 14 (as amended) and dependent Claims 19-36.

Independent Claim 37

Claim 37 is in independent form and recites a “liquid chromatography sample injection system” comprising in combination with other elements, a “probe drive system” that comprises an “X arm extending horizontally in an X direction; a Y arm slidably mounted on the X arm wherein the Y arm extends horizontally in a Y direction; and a Z arm slidably mounted on the Y arm wherein the Z arm extends vertically in a Z direction; and a probe holder slidably mounted on the Z arm” and “an injector valve mounted on the Z arm.”

The Applicant submits that the combination of subject matter recited in independent Claim 37, considered as a whole, is not disclosed, taught or suggested by Jones, alone or in any combination with the other references cited in the Final Office Action, because Jones, alone or in

any proper combination with Heimberg et al. does not disclose, teach or suggest a “probe holder slidably mounted on the Z arm” as required by independent Claim 37.

Accordingly, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of independent Claim 37.

Independent Claim 38

Claim 38 is in independent form and recites a “method of injecting a sample into a sample analyzer of a liquid chromatography sample injection system” comprising in combination with other elements, the steps of “operating a pump to provide a negative pressure through a pump valve for aspirating a liquid sample through a probe of the probe drive system and into the injection valve” and “operating the pump to provide a positive pressure through the pump valve for injecting the entrained liquid sample into a sample analyzer” and “rinsing the probe by operating the pump to deliver a solvent through the pump valve and the injection valve to the probe.”

The Applicant submits that the combination of subject matter recited in independent Claim 38, considered as a whole, is not disclosed, taught or suggested by Jones, alone or in any combination with the other references cited in the Final Office Action, because Jones does not disclose, teach or suggest a “solvent” and a “pump valve” operable for “rinsing the probe” as required by independent Claim 38.

Accordingly, the Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of independent Claim 38.

Claim Rejections – 35 U.S.C. § 103(a)

In Sections 6-9 of the Final Office Action, the Examiner rejected dependent Claims 23-25, 27-28, 30 and 33-34 under 35 U.S.C. § 103(a) as being unpatentable over Jones, alone, and in combination with other cited references.

Dependent Claims 23-25, 27-28, 30 and 33-34 depend from independent Claim 14. The Applicant submits that independent Claim 14 recites a combination of subject matter that is patentable. Accordingly, the Applicant respectfully submits that the rejections under 35 U.S.C. § 103(a) have been overcome and that dependent Claims 23-25, 27-28, 30 and 33-34 are also patentable (see 35 U.S.C. § 112 ¶ 4).

The Applicant respectfully submits that each and every outstanding objection and rejection of the pending claims has been overcome and that the Application is in condition for allowance. As a result, Applicant respectfully requests reconsideration and allowance of pending Claims 14 and 19-38.

The Examiner is encouraged to contact the undersigned by telephone if the Examiner believes that a telephone interview would advance the prosecution of the present Application.

Respectfully submitted,

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